ADMINISTRATIVE MEMORANDUM

TO: CPQCC PARTICIPANTS

FROM: JEFF GOULD, GRACE VILLARIN DUENAS

SUBJECT: 2008 CPQCC MANDATED CHANGES: REVISIONS TO THE 2008 EDS SPECIFICATIONS

DATE: 11/20/2007

CC: BARBARA MURPHY, BEATE DANIELSEN, FULANI IRVING, PEMITA PA'AGA, CCS, CPETS

MANDATED CHANGES FOR 2008: RELEASE OF 2008 EDS SPECIFICATIONS

The California Perinatal Quality Care Collaborative (CPQCC), the Vermont Oxford Network (VON), the California Perinatal Transport Systems (CPeTS), and the California Children's Services (CCS) have made several important mandated changes to the data collection effective in 2008.

The reporting of total and birth weight specific NICU activity, morbidity and mortality through CPQCC has been mandated by the CCS, while the systematic review and reporting of neonatal transports in California has been mandated through the CPeTS. This means that one must be a member of CPQCC and report the required elements using the CPQCC/VON, the CPQCC/CPeTS, and the CPQCC/CCS data formats. The compliance with the dataset changes is required for a CCS-approved NICU to meet this mandate.

*** 10/25/07: Please note clarifications for Items 3, 9, 10, 12, 13, 21, and 24**

I. New and Revised Items to the CPeTS Transport Form

A. The following items have been added for 2008:

1. Revised coding rule for CPeTS item T.1. Transport Type. For infants born in 2008, a new code **Urgent transport (T.1. T_TYPE, code=5)** has been added to distinguish a transport that is an allowable delay within a matter of hours (not days such as Scheduled Transports) but not an ASAP Transport.

2. A new **User Comment box (T.34. T_USERCOMMENT)** has been added to allow users to add record notes at the end of each Acute Transport record.

B. The following items have been revised for 2008:

3. **Remove Unknown options** from the following CPeTS hospital location items: **T.27a. First Transfer for infant, T.27b. Previously Transfer Referring Hospital, T.28. Location of Birth.**

II. New and Revised Items to the CPQCC Admission/Discharge Form

A. The CPQCC Data System builds upon Vermont Oxford Network's (VON) neonatal system for very low birth weight babies (VLBW). As a result of recent changes made by VON to their dataset, the following new data items have been added for infants born in 2008:

4. A new data item Chorioamnionitis has been added to the VON dataset. In 2007, this item is included in the CPQCC dataset under Item 17. Maternal Antenatal Conditions: Intrauterine Infection, but was optional for infants with birth weight 1500 grams or less. **For 2008, Item 17 the variable name and definition will be changed to Maternal Antenatal Conditions: Chorioamnionitis (Item 17. ANCMCHORIO) and will be mandatory for all CPQCC-eligible infants.**

5. A new data item Maternal Hypertension has been added to the VON dataset. In 2007, this item appears in the CPQCC Admission/Discharge form under Item 17. Maternal Antenatal conditions **(Item 17. ANCMHYP)** and was optional for infants with birth weight 1500 grams or less. In 2008, this item will be **mandatory for all CPQCC-eligible infants.** The definition will be amended to include **"maternal blood pressure above 140 systolic or 90 diastolic…"**

6. A new data item Inhaled Nitric Oxide at Your Hospital has been added to the VON dataset. In 2007, this was Item 30 in the CPQCC Admission/Discharge form. In 2008, CPQCC will continue to collect **Inhaled Nitric Oxide (Item 30. NITRICO)**.

7. A new item **Ibuprofen for PDA (Item 39c. IBUPROFEN)** has been added to the VON and CPQCC datasets. This is a new item in the 2008 CPQCC dataset. It will be located in the PDA section: **39a) PDA, 39b) Indomethacin, 39c) Ibuprofen for PDA, 39d) PDA Ligation.**

CPQCC has initiated the following to improve data linkage:

8. The variable Transferred to another CPQCC Center (Item 59. XFER_OUT) will be **replaced by the variable Transfer Location (Item 59. XFERLOCATION) which will collect the 6-digit OSHPD hospital ID a baby was transferred to.**

B. The following items have been revised for 2008:

9. Based on feedback from our Data Contacts that it's easier to abstract all items for both Small Babies and Big Babies, we have decided to make **Item 17 (Antenatal Conditions) and Item 18 (Indications for Cesarean Section) mandatory in 2008 for all CPQCC-eligible infants.**

10. VON revised the definition of Temperature within the First Hour After Admission to Your NICU (**Item 22a. ATEMPM**). For infants born in 2008, VON has clarified that "this item applies to the first temperature of the infant during the first hour after admission to your NICU. Do not record the temperature measurements taken at the transferring center for outborn infants." Furthermore, "if an attempt was made to measure the temperature during the first hour after admission to your NICU, and the temperature of the infant was lower than the thermometer could measure, check 'Yes' and record the lowest temperature on the thermometer in **Item 22b. ATEMP**."

11. VON revised the definition of Nasal IMV or Nasal SIMV (**Item 23e. NIMV**). For infants born in 2008, the definition of Nasal IMV or SIMV will be revised as follows (changes bolded and underlined):

    Check "Yes" if the infant received the intermittent positive pressure ventilation (intermittent mandatory ventilation or synchronized intermittent mandatory ventilation) via nasal prongs **<u>or other nasal device</u>** at any time after leaving the Initial Resuscitation Area.

    Check "No" if the infant did not receive intermittent positive pressure ventilation via nasal prongs **<u>or other nasal device</u>** at any time after leaving the Initial Resuscitation Area.

    Note: This item should be coded "Yes" if the infant receives positive pressure patterns that include two or more levels of positive pressure such as "BiPAP" or "SiPAP."

12. VON has revised the definition of RDS (**Item 27. RDS**). For infants born in 2008, the definition of RDS will be revised as follows (changes bolded):

    Check "Yes" if the infant had respiratory distress syndrome (RDS), defined as:
    A. PaO2 <50 mmHg in room air, central cyanosis in room air, a requirement for supplemental oxygen to maintain PaO2 >50 mmHg, or a requirement for supplemental oxygen to maintain a pulse oximeter saturation over 85% **within the first 24 hours of life.**
    AND
    B. A chest radiograph consistent with RDS (for example, reticulogranular appearance to lung fields with or without low lung volumes and air bronchograms) **within the first 24 hours of life.**

    Check "No" if the infant did not satisfy both of the criteria A and B above.

13. CPQCC has improved the assignment of Quality Metrics to the NICU of Occurrence. Revisions to the coding rules will be implemented to better track where an event occurred for the following conditions:

    a. Pneumothorax (**Item 28. PNTX**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

    b. Postnatal Steroids administration for chronic lung disease (**Item 32b. POSTERCLD**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

    c. Late bacterial sepsis – bacterial pathogen (**Item 37a. LBPATH**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 21=Other Here, 22=Other Elsewhere, 23=Other Here AND Elsewhere, 31=GBS Here, 32=GBS Elsewhere, 33=GBS Here AND Elsewhere, 41=e.Coli Here, 42=e.Coli Elsewhere, 43=e.Coli Here AND Elsewhere.

    d. Late bacterial sepsis – coagulase negative staph (**Item 37b. CNEGSTAPH**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

e. Late sepsis – fungal (**Item 37c. FUNGAL**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

f. Surgery: PDA ligation (**Item 39d. SRGLIG**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

g. Surgery: NEC (**Item 40b. SRGNEC**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

h. Surgery: ROP (**Item 42c. SRGROP**). Revised coding rules will be as follows: 0=No, 7=N/A, 9=Unknown, 11=Yes Here, 12=Yes Elsewhere, 13=Yes Here AND Elsewhere.

i. Other Surgery 1-10 (**Item 43. SRGCD1 – SRGCD10**). Revised coding rules will be as follows: add B or E or H to the alphanumeric string to indicate whether surgery occurred at B=both locations or E=elsewhere or H=here.

14. VON made modifications to Bacterial Pathogen List (**Item 37a. LBPATH**). For infants born in 2008, the list of Bacterial Pathogens is modified as shown in Appendix B of the 2008 CPQCC EDS Specifications. This includes the following changes:

    a. Ralstonia species is added to the list.
    b. Strep milleri is added to the specific species in parenthesis following "29. Streptococcus species".

15. VON revised the definition of the Worst Stage of ROP (**Item 42b. ISTAGE**). Stage 5 ROP is added (responses allowed include 0 to 5). For infants born in 2008, the definition for Worst Stage of ROP will be revised as follows (changes bolded):

    If a retinal examination was performed, enter the worst stage documented on any exam in the eye with the most advanced stage[1]. Do not answer this item if the answer to "Was a Retinal Examination Performed" is "No".

    Stage 0: No evidence of ROP
    Stage 1: Presence of demarcation line (+/- abnormal vascularization)
    Stage 2: Presence of intraretinal ridge
    Stage 3: Presence of a ridge with extraretinal fibrovascular proliferation
    Stage 4: Partial retinal detachment
    Stage 5: Total retinal detachment

    [1] **An International Committee for the Classification of Retinopathy of Prematurity: The International Classification of Retinopathy of Prematurity Revisited. *Arch Ophthalmol* 2005; 123:991-999.**

16. VON made modifications to the Surgery Codes (**Item 43. SRGCD1 – SRGCD10, SRGOTHDESC**) and clarified the procedures for submitting surgery data. These modifications include the following:

a. Clarifications to procedures for submitting surgery codes. The Manual of Operations for infants born in 2008 will be modified to add the following clarifications for submitting surgery code data:

Central lines are not considered surgery. Please **do not** record any of the following as surgery: Broviac catheters, percutaneous venous catheters, central venous catheters, PICC lines, umbilical artery lines, umbilical venous lines, or any other intravascular catheter. We recognize that some of these lines may be placed while the infant is under anesthesia for other procedures. Do not code any lines as surgery even if they are placed under general or spinal anesthesia.

If a specific procedure is not on the list of surgical codes, do not use codes 100, S200, S300, S400, S500, S600, S700, S800, or S900 unless the procedure is performed under general or spinal anesthesia. These "other" codes require that the procedure was done under general or spinal anesthesia.

Do not use "other" codes to further describe surgical procedures that are on the list or to indicate why procedures are performed. Codes for "other" procedures like S100, S200, S300, etc., should only be used to identify procedures for which there is no specific code and when general or spinal anesthesia are used for the procedure. Do not use these "other" surgery codes to add a description of how or why the procedures are done. For example, do not use S500 to add a description for the S504 procedure or to explain why heart surgery was performed.

ECMO, ECMO cannulation, ECMO decannulation are not considered surgery. Please do not code ECMO, ECMO cannulation, or decannulation as surgery even if the procedures are performed under anesthesia.

Peritoneal dialysis and placement or removal of peritoneal dialysis catheters are not considered surgery.

Chest tube placement is not considered surgery.

Cardiac surgery for the repair or palliation of congenital heart disease is coded as S504. Please do not use code S500 to further describe the details of that surgery.

Isolated PDA ligation is coded using item 39d. If PDA ligation is performed as an isolated procedure for PDA, do not enter a surgery code in Item 43 (only check 'Yes" to Item 39d). If the PDA is ligated as a component of the repair or palliation of congenital heart disease, use code S504.

b. The section labeled "Abdomen" on the surgery code list is renamed as "Abdominal and Gastro-Intestinal".

c. For infants born in 2008, the Surgery Codes list is modified as shown in Appendix C of 2008 CPQCC EDS Specifications document (enter hyperlink) and as indicated below.
(1) The following code is removed from the list and is not applicable to infants born in 2008:

<u>Code Description</u>
S415 Circumcision

(2) The following new codes are added to the existing sections of the list:

Code Description
S108 Mandibular (jaw) distraction
S212 Surgery for Congenital Cystic Adenomatoid Malformation of the Lung
S213 Lung transplant
S334 Anoplasty
S335 Kasai procedure
S336 Open liver biopsy
S416 Pyeloplasty
S417 Renal transplant
S505 Heart transplant

(3) A new section, Conjoined Twins, is added with the following new code:
Code Description
S1101 Separation of conjoined twins

17. VON revised the definition of Cystic PVL (**Item 46b. PVL**). For infants born in 2008, the definition of Cystic PVL will be revised as follows (changes bolded):

    Check "Yes" if the infant has evidence of cystic periventricular leukomalacia on a Cranial Ultrasound, **CT, or MRI scan** obtained at any time.

    Check "No" if there was no evidence of cystic periventricular leukomalacia on any Cranial Ultrasound, **CT, or MRI and at least one cranial imaging study (ultrasound, CT, or MRI)** was done.

    Check "Not Applicable" **if no cranial imaging study (Ultrasound, CT, or MRI)** was ever done.

    Note: To be considered cystic periventricular leukomalacia there *must* be multiple small periventricular cysts identified. Periventricular echogenicity on ultrasound without cysts should not be coded as cystic periventricular leukomalacia. A porencephalic cyst in the area of previously identified intraparenchymal hemorrhage should not be coded as cystic periventricular leukomalacia. **Periventricular abnormalities on CT or MRI should not be coded as cystic periventricular leukomalacia unless multiple small periventricular cysts are identified.**

18. VON made modifications to the Major Birth Defects Codes (**Item 49. BCD1 – BCD5**). For infants born in 2008, the Major Birth Defects Codes list is modified as shown in Appendix D of the 2008 CPQCC EDS Specifications. This includes the following changes:

    a. The following new birth defect codes are added to existing sections of the list:
    Code Description
    220 Penatalogy of Cantrell (Thoraco-Abdominal Ectopia Cordis)
    505 Triploidy
    607 Conjoined Twins
    608 Tracheal Agenesis or Atresia
    609 Thanatophoric Dysplasia Types 1 and 2
    610 Hemoglobin Barts

    b. A new section, Pulmonary Abnormalities, is added to the Major Birth Defects Codes list with the following new codes:

Code Description
802 Congenital Cystic Adenomatoid Malformation of the Lung
800 Other lethal or life threatening pulmonary malformation

19. CPQCC has modified the on-line form. The variables Length of Stay (**Item 57. LOS1**) and Total Length of Stay (**Item 64. LOSTOT**) will be **replaced by a date box** that collects the actual date of discharge. Similar to the Transport form, a message below the item will indicate the Length of Stay implied by the date provided. **NOTE:** EDS submittors MUST continue to submit the variables Length of Stay (LOS1) and Total Length of Stay (LOSTOT) as integers.

The 2008 CPQCC EDS Instructions and Specifications are now available in the Data Center webpage, www.cpqcc.org. Please review Section V for the Summary of Changes to Data Elements and Procedures for 2008.

III. Revisions to the 2007 and 2008 CCS Supplemental on-line forms

CCS has initiated the following revisions to clarify the definitions used to enumerate the infants admitted to your NICU:

20. Revised definition of Inborn Admissions (Table B). We have clarified that **Inborn Admissions to your NICU** should only include the number of inborn infants who were admitted to your NICU **after birth and without being previously discharged or transferred-out.** We deleted the distinction between inborn infants admitted to your NICU less than or greater than 12 hours.

21. Revised definition of Outside Admissions (Table B). We have clarified the term CCS Outborn Admissions previously used in 2007. In 2008, we are introducing the term **Outside Admissions** to emphasize that CCS defines this term differently from how CPQCC/VON defines the term Outborn Admissions to indicate an infant's location of birth. The term **Outside Admission** is defined by CCS as one of the following:

    1) an acute/non-acute transfer-in to your NICU of an in-patient from another facility (CPQCC Inborn or CPQCC Outborn); **OR**

    2) an acute/non-acute admission to your NICU of any CPQCC outborn infant regardless of the location, e.g., home, another area in your hospital, ER, doctor's office; **OR**

    3) an acute/non-acute inborn readmission.

    NOTE: CCS counts eligible infants by admission, not by infant. Thus, the number of CCS Outside Admissions entered into your CCS Supplemental Form may exceed the number of CPQCC Outborn infants entered into the CPQCC Network database.

22. Revised definition of Acute Outside Admission to your NICU (Table B). This term is defined as follows:

    a. An Acute Outside Admission is:
    1) an acute transfer-in to your NICU of an in-patient from another facility (CPQCC

Inborn or CPQCC Outborn); or
2) an acute admission to your NICU of any CPQCC outborn infant regardless of the location, e.g., home, another area in your hospital, ER, doctor's office; or
3) an acute inborn readmission.

AND

b. An Acute Outside Admission is defined as the admission of an infant with medical problems that require urgent care. If the infant is an acute transfer-in then the care that is medical, diagnostic, or surgical therapy is not provided, or cannot be provided due to temporary staffing/census issues, or cannot be provided due to insurance restrictions, at the referring hospital.

23. Revised definition of Non-acute Outside Admissions to your NICU (Table B). This term is defined as follows:

    a. A Non-acute Outside Admission is:
    1) an non-acute transfer-in to your NICU of an in-patient from another facility (CPQCC Inborn or CPQCC Outborn); or
    2) a non-acute admission to your NICU of any CPQCC outborn infant regardless of the location, e.g., home, another area in your hospital, ER, doctor's office; or
    3) a non-acute inborn readmission, e.g. hospice care.

    AND

    b. A Non-acute Outside Admission is defined as the admission of an infant for growth care, discharge planning care, chronic care, convalescent care, and/or hospice care. If an infant is a non-acute transfer-in, then the infant's initial medical, diagnostic and surgical needs have been met and the infant's condition has been stabilized. The medical needs of non-acute transfers-in may range from extensive and extremely complex care to minimal care for feeding and growth.

24. Revised definition of the Delivery Room Expirations (Table G). We have clarified the definition as follows:

    "For each death, enter the information requested. Do not include stillborns. Only include infants who expired **in the delivery room or any other location in your hospital** within 12 hours after birth and prior to NICU admission. There is no cut-off for gestational age or birth weight.

In the next few months, we plan on revising the forms and manuals to reflect these changes. Although these changes may involve work adjustments to fulfill the new requirements, ultimately the addition of these new data items support the best interests of the membership since CPQCC Members have previously requested the addition of several of these data items for quality improvement purposes.

We anticipate that Members who submit data electronically and use their existing internal databases for tracking clinical events and outcomes at the NICU may be impacted by this change. If this is the case for your center, please do not hesitate to contact the CPQCC Data Center at 510.620.3148 or

email us at support@cpqcc.org. We welcome the opportunity to assist centers as they meet this requirement.

Thank you for your cooperation.